



# THE MINERAL VEIN

Official Newsletter of

**THE MINERAL SOCIETY OF MANITOBA**

**MARCH 2018**

## **FEBRUARY MINERAL TRADE SUMMARY**

By Jack BAUER

Our meeting on February 7th was our first "mineral trade night" we have had in many years. In the 1990's, when I first joined the Mineral Society, this used to be a regular occurrence. Mineral collectors and dealers traveling across the country, would stop by and would show us their collections and or specimens for sale. We are hoping this would become a regular occurrence, maybe two or three times a year.

We had a fairly good attendance, of about 29 members for our first one. Many members bring their specimens, thanks to the efforts of our Vice President, Danial Mckay. We also had five new members join. To them , I say welcome, to the Mineral Society of Manitoba and may all of your



President Carrie Carino showing some of her minerals

Refreshments were served and discussions were lively. We also put out sign up sheets, for the upcoming field trips. We will bring them back for the next meeting, for the members that were unable to make this last meeting. Also, if any members have ideas/suggestions for field trips, please suggest them, and we will try to make them a reality. Danial and myself discussed the field trips with the membership, to update and with hopes of getting some feedback.

We have three single day field trips and three multiple day trips planned.

To sign up for the field trips, please contact Danial McKay or myself to register. We will bring the sign up sheets to the next meeting in March.



Jack Bauer with a nice gypsum specimen

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## THE MINERAL SOCIETY OF MANITOBA

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*The Mineral Vein* is published monthly from September to June.

**Meetings** are held on the first Wednesday of each month from September to May inclusive at the Manitoba Museum in room P47 on the Planetarium level. They begin at 7:30 PM and feature announcements, an invited speaker and a raffle. Members are encouraged to bring along any new, interesting specimens, or specimens appropriate to the speaker's topic.

**Field Trips** take place from May to September to interesting sites in Manitoba or neighbouring provinces and states.

**Membership:** A single membership is \$15 while a family membership is \$20. Memberships run from October to October.

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### UPCOMING EVENTS

**March 7, 2018:** MSM regular monthly meeting begins at **7:00 p.m.** at the Manitoba Museum. Our guest speaker this month will be Dr. Eva Pip, retired University of Winnipeg biology professor and water quality expert. Her talk will be "Fakes! Mine Fields and Pit Falls for the Innocent - How Not to Get Fleeced". If you are a mineral, gem or fossil collector, or even a museum, you have some fakes in your collection! In this presentation, we will learn about the different kinds of fakes, the clever ways we can get swindled, the various methods and materials that are used to hoodwink the unsuspecting collector, and how to identify things that are no as they appear. Advice and strategies are offered on how to protect ourselves when we invest our hard-earned, tightly budgeted rock collection dollar, gleaned from a long lifetime of unfortunate experience and buying mistakes!

**April 4, 2018:** MSM regular monthly meeting begins at **7:30 p.m.** at the Manitoba Museum. Our guest speaker, Liga Kalina, will talk about opals.

**May 2, 2018:** MSM regular monthly meeting begins at **7:30 p.m.** at the Manitoba Museum. Our guest speaker, Kathryn Lapenskie will talk about fossils.



Founded in 1971, the Mineral Society of Manitoba is dedicated to promoting the study of minerals, rocks and fossils for their scientific and recreational value. The Mineral Society of Manitoba hosts monthly meetings covering a variety of mineral related topics. In addition, the Mineral Society organizes summer field trips to collecting localities, and hosts educational exhibits about minerals and fossils.

## **FIELD TRIP INFORMATION**

By Jack BAUER

Here is some basic information for new members, that is relevant to all field trips.

1. Dress for the weather. Wear light coloured and loose fitting clothes, when it is hot out. You will be less likely to be attracting mosquitoes as they are attracted to dark sweaty clothes.
  2. Proper hiking boots that provide ankle protection are recommended. In the spring, during wood tick season, it is recommended to wear wool socks and tuck in your pants.
  3. For single day trips, bring a light lunch with plenty of drinking water. Bring work gloves, mosquito repellent and tools that are relevant to the trip.
  4. Arrange a ride share with fellow members to share expenses.
  5. Bring a map. If you are not familiar with the locations of the sites, advise your trip leader and get proper directions.
  6. More information will be provided, specific to the individual trips such as meeting places, departure times, directions, accommodations, travel times, tools and information that is site specific.
  7. If you have signed up for a trip and cannot make it, please advise the field trip leader, as soon as possible.
  8. When you sign up for a trip, please provide your contact information and how many are in your party. If your numbers change, please advise your field trip leader.
  9. Most of our trips will be subject to the weather. Sometimes a back up date will be planned. If the weather threatens to cancel or postpone the trip, contact your field trip leader the day before.
  10. Safety is a big concern for the Mineral Society and property owners. Please respect the rules. We always have a first aid kit with us. Unsafe behavior, will not be tolerated.
  11. Have fun, but leave behind only your foot prints. Bring your garbage home!
- Good Luck, in your collecting endeavors, this summer in 2018!

## **PRESIDENT'S MESSAGE**

By Carrie Carino

I would like to extend my gratitude and appreciation to all the previous executive for all their long-term dedication to the Mineral Society of Manitoba. In addition, thank them all for their donations of supplies and time spent volunteering and preserving the Legacy of The Mineral Society.

I look forward to the potential future of the Mineral Society and all the volunteer opportunities that will benefit our community and members. We are privileged as a Society to be able to have the resources and possibilities to bring the knowledge of Earth Sciences to the future Geologists and mineral collectors of Manitoba. There will be plenty of volunteer experiences available that will include fun benefits for everyone who participates. I'm hopeful that the members will support the new opportunities that the Mineral Society will be engaged in.

Members perform an important and valuable role, as you are a representative of the Mineral Society of Manitoba. I would like to remind members to conduct themselves in a manner that is respectful, demonstrate good ethics and use discretion when interacting with other members or the community.

The previous executive has done a phenomenal job and deserves recognition for their hard work. Thank you to all the members for participating over the years in monthly meetings, field trips, rock swap and other exceptional events. We are at a pivotal moment as a Society, we should all work together to make the Mineral Society recognized as a prominent Earth Science group of Manitoba.

Best wishes to everyone for a successful field trip season in 2018, See you at the rock pile!

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## **VOLUNTEERS NEEDED**

1. Silver Cove, April 12th to the 15th. We would like to put in a table to promote the Mineral Society with our black light display. We will need members to be at the booth.
2. Manitoba Museum, upcoming in about 3 months. stay tuned for more information

## APPLE NEEDS COBALT

Files from the Financial Post

With cobalt prices soaring and fears of a potential shortage mounting, reports emerged that Apple Inc. is in talks with a mining company to secure a direct supply of the scarce metal — a critical component of batteries.

Since 1996, Fortune Minerals Ltd. has raised tens of millions of dollars and completed a feasibility study that showed his project in the Northwest Territories could produce 1,615 tonnes of cobalt annually — about 37 per cent of what Canada produced in 2017.

Part of the mine's problems relates to its location: About 150 kilometers from Yellowknife. To operate, the mine needs a road, which is currently awaiting environmental review, and has not yet been permitted, let alone financed and built.

The company is working on a new feasibility study to show the mine could produce 2,000 metric tonnes of cobalt per year, in addition to gold and bismuth, an ingredient in antacid medicine Pepto-Bismol and other products.

In 2014, the estimated cost of the mine was \$580 million. By now, that price tag is likely higher and the company said several undisclosed parties, including well-known battery producers, are looking at investing in Fortune Minerals and its construction costs.

This situation illustrates the peculiar economics of cobalt — whose price has tripled to US\$38 per pound in the past 18 months — as executives at tech companies and in the automotive industry prepare for a transition from fossil fuel to electrical vehicles in the next decade, a switch that would dramatically increase the demand for the metal.

Most of the world's cobalt comes from the Democratic Republic of Congo (DRC), which produced 64,000 of 110,000 tons of cobalt in 2017, according to the U.S. Geological Survey. Canada produced 4,300 tons, about 3.9 per cent of the world's total, behind Russia and Australia, at 5,600 and 5,000 respectively.

Still, in the DRC, concerns about child labor are rampant, according to a 2017 report by UNICEF, the United Nation's children welfare agency.



Although that raises ethical concerns, finding new sources of cobalt is difficult. Cobalt is generally found in extremely scarce quantities, usually as a byproduct where copper, nickel or another metal is the primary mineral being mined.

Even if cobalt rises to US\$50 per pound, where it was in 2007, it may be irrelevant. If cobalt is just a byproduct and the price of the main mineral being mined isn't high enough, it won't make sense to finance a cobalt mine. That dynamic may be what's driving companies that need cobalt, such as Apple, BMW, Tesla and other to seek strategic investments with mining companies. Apple, which is developing an autonomous driving system, is in direct talks with a mining company to secure its own cobalt supply.

In Canada, one of the most likely places to explore is Cobalt, Ontario. Contrary to what its name implies, the area was primarily silver mines with cobalt appearing as a byproduct. Sometimes, the cobalt was discarded next to the mines, according to Trent Mell, chief executive of First Cobalt, which has been purchasing properties around Cobalt.

It's easy to find trace quantities of cobalt in the area because the mineral turns a pink hue when it reacts with oxygen. "You can see lots of pink on the surface, but you've got to find tons of it," he said.

That hasn't happened yet. But in the meantime, the company is sampling "the muckpiles," hoping the cobalt it does find will generate enough cash to explore for the jackpot reserve.

"It's hard to figure out where to go next," he said. "But I like to point out we as miners have never really looked-for cobalt."